

From: <u>Gray, David</u>

To: <u>Bowman, Liz; Coleman, Sam; Kelly, Albert; Forsgren, Lee; Wagner, Kenneth</u>

 Cc:
 Forsgren, Lee; Jackson, Ryan; Carey, Curtis

 Subject:
 RE: Follow-up: Houston DC-8 flight

 Date:
 Monday, September 11, 2017 2:07:00 PM

All – Below is Texas response. They have asked that NASA not to conduct this proposed mission.

David

Dr. Zurbuchen,

We appreciate your offer of help. Our stationary air monitors are now up and running and the data we are collecting are not showing levels of concern, even though many industries have already begun to restart their operations. We do not think we have wide-spread issues, but it is possible we have some localized sources. We are in the process of contracting with a company to do low-level flyovers with a helicopter equipped with an IR camera to see if we can find any such sources. At this time, we don't think your data would be useful for source identification while industry continues to restart their operations. Again, we sincerely appreciate your offer of help.

Best,

Mike

From: Bowman, Liz

Sent: Monday, September 11, 2017 1:38 PM

To: Coleman, Sam <Coleman.Sam@epa.gov>; Kelly, Albert <kelly.albert@epa.gov>; Forsgren, Lee <Forsgren.Lee@epa.gov>; Wagner, Kenneth <wagner.kenneth@epa.gov>; Gray, David



<gray.david@epa.gov>

Cc: Forsgren, Lee <Forsgren.Lee@epa.gov>; Jackson, Ryan <jackson.ryan@epa.gov>; Carey, Curtis <Carey.Curtis@epa.gov>; Gray, David <gray.david@epa.gov>

Subject: RE: Follow-up: Houston DC-8 flight

Thanks, Sam. Yes, we agree that it might be good if we can coordinate in a way that supports our efforts and provides reliable data and information.

From: Coleman, Sam

Sent: Friday, September 8, 2017 7:59 PM

To: Kelly, Albert < kelly.albert@epa.gov>; Forsgren, Lee < Forsgren.Lee@epa.gov>; Wagner, Kenneth < wagner.kenneth@epa.gov>; Gray, David < gray.david@epa.gov>

Cc: Forsgren, Lee < <u>Forsgren.Lee@epa.gov</u>>; Bowman, Liz < <u>Bowman.Liz@epa.gov</u>>; Jackson, Ryan < <u>jackson.ryan@epa.gov</u>>; Carey, Curtis < <u>Carey.Curtis@epa.gov</u>>; Gray, David < <u>gray.david@epa.gov</u>>

Subject: Re: Follow-up: Houston DC-8 flight

Thanks Lee for running this to ground. I think this should be something that is actually useful to the response. One idea is to have them fly some of the facilities that are requesting enforcement discretion from their consent decrees. This should not impact the granting of discretion, and we can get some data with respect to emissions. This assumes that the technology is reliable. ORD should opine on the reliability of the data from this technology. However, if we cannot assure ourselves of reliable data, I think this is a distraction that we do not have time to get involved in.

I am adding David Gray to check this out with the State concurrently with ORD thinking about the technology.

Samuel Coleman, P. E., Deputy Regional Administrator

214.665.2100 Ofc 214.665.3110 Desk 214.665.2016 Cell

Coleman.sam@epa.gov

Sent from my iPhone

On Sep 8, 2017, at 5:30 PM, Kelly, Albert < kelly.albert@epa.gov > wrote:

Thanks Lee. We appreciate you

Sent from my iPad

On Sep 8, 2017, at 5:29 PM, Forsgren, Lee < Forsgren.Lee@epa.gov > wrote:

Kell,

I will stand by for Sam to provide his input but will be ready to go back to Robert Lightfoot and have him waive off the Flight as soon as possible.

Thanks for the quick turnaround.

Regards, Lee

From: Kelly, Albert

Sent: Friday, September 8, 2017 6:26 PM **To:** Forsgren, Lee < Forsgren.Lee@epa.gov>

Cc: Bowman, Liz < Bowman.Liz@epa.gov >; Jackson, Ryan

<<u>jackson.ryan@epa.gov</u>>; Coleman, Sam <<u>Coleman.Sam@epa.gov</u>>;

Carey, Curtis < Carey.Curtis@epa.gov>

Subject: Re: Follow-up: Houston DC-8 flight

I have forwarded to Sam Coleman who was unaware of this. It is the view of all parties here (EPA, FEMA,TCEQ) that this information is not helpful or usable and that we should waive them off. I have copied Sam on this and will allow him to confirm or amend but I believe the best course is to not have this done.

Sent from my iPad

On Sep 8, 2017, at 5:19 PM, Forsgren, Lee < Forsgren.Lee@epa.gov> wrote:

Liz and Kell,

Here is Robert Lightfoot (Acting NASA Administrator) response to our conversation. We might want to touch Terry Keating and Arturo Blanco and see if in fact they actually asked or NASA's help? It is clear that if we want to waive them off doing Harvey related monitoring we still can do so with relative ease.

Let me know if you want me to go back to Robert and vector them in a different direction.

Regards, Lee

D. Lee Forsgren

Deputy Assistant Administrator Office Of Water Environmental Protection Agency 1200 Pennsylvania Avenue, VW Room 3219 WJCE Washington, DC 20460

Phone: 202-564-5700 Forsgren.Lee@epa.gov

From: Lightfoot, Robert M. (HQ-Al000)
[mailto:robert.m.lightfoot@nasa.gov]
Sent: Friday, September 8, 2017 5:54 PM
To: Forsgren, Lee < Forsgren. Lee@epa.gov>
Subject: FW: Follow-up: Houston DC-8 flight

Lee,

See below. Looks like we were getting ready to do some test flights for a future mission and our PI thought we could provide some data to support the Harvey recovery effort. As you can see below, our team reached out to see if this would be helpful and if so, what advice on the sampling plan for the flight.

Hope this is helpful and glad our team was proactive in recognizing they could turn a test flight into something to provide some real data, and it appears to have been coordinated.

Shout if you or Scott have any questions....my cell is (b) (6)



Thanks, Robert

Subject: Follow-up: Houston DC-8 flight

SMD/Earth Science is preparing to send the DC-8 to spend several hours in southern Texas sampling atmospheric trace gases and aerosols - these include a full suite of Volatile Organic Compounds (VOCs) and several air toxics.

This effort is part of preparations for an upcoming campaign of the Atmospheric Tomography Mission (ATom), which is an Earth Venture-Suborbital mission. The ATom science team had a planned DC-8 test flight on September 14th — yesterday afternoon (Sept 7), the ATom PI Steve Wofsy asked Headquarters if it would be OK if they flew from Palmdale to Houston to sample the atmospheric composition during this test flight. We agreed that this would be a good opportunity to support the Hurricane Harvey recovery effort.

This morning Barry Lefer (Tropospheric Composition Program Manager in SMD/Earth Science) contacted colleagues at NOAA, EPA, the Texas Commission on Environmental Quality (TCEQ), and the City of Houston to make them aware of this effort and to ask for any advice regarding our sampling plan. We have had good coordination and collaboration with all of these entities.

The primary people Barry coordinated with at EPA on this were:

- Terry Keating, EPA Office of Research and Development (formerly with EPA's Office of Air and Radiation); Terry has been a long-term collaborator with NASA on Earth science activities for research and applications
- Arturo Blanco, EPA Region 6 (South Central US). Arturo is part of the EPA Rapid Response Team; he was formerly the Bureau Chief for Air Quality Control for the City of Houston.

If you need it, Barry can also provide you with the primary people he contacted at NOAA, TCEQ, and City of Houston. Over the weekend, he will provide the list of sensors that are part of the DC-8 payload – and, when the flight plan is more firm, he can provide information on that.